

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

March 2, 2007

OK

TO: Internal File

THRU: Wayne Hedberg, Permit Supervisor *DWH*

FROM: James D. Smith, Environmental Scientist III – Hydrology, Team Lead *DS*

RE: Loadout Expansion, Task # 2739, CO-OP Mining Company, Bear Canyon Mine, Permit C/015/0025

SUMMARY:

The proposed loadout expansion at the Bear Canyon Mine consists of widening the loadout areas by removing 687 yd³ of material, mostly substitute topsoil, from the side of the coal storage pad and adding two large retaining walls along the stacking area. This will widen the coal loading area and ease traffic flow. The previous submittal of this amendment included adding a retaining wall along the Bear Creek side of the pad and adding fill to widen the loadout, but plans for this work on the creek side of the pad have been removed from the amendment.

There is one deficiency that should be addressed before the Division approves this amendment

TECHNICAL ANALYSIS:

GENERAL CONTENTS

PERMIT APPLICATION FORMAT AND CONTENTS

Regulatory Reference: 30 CFR 777.11; R645-301-120.

Analysis:

The Loadout Expansion amendment was submitted as one hard copy and four CDs in Adobe[®].pdf format. The discs do not contain Appendix 5-Q, but that appendix is included with the hard copy: the Permittee needs to assure Appendix 5-Q is included with all final copies.

Appendix 5Q describes the following phases in the construction of the load-out expansion, which the Permittee states are to be done in eight steps:

1. Remove old culverts
2. Earthwork
3. Install the large retaining wall next to the coal pad.
4. Install new culverts
5. Install concrete loading pads
6. Install Road
7. Extend the belts
8. Install Sampling Station.

Because of the need to keep the loadout operational, work on these steps may be performed concurrently or in a different order.

Findings:

Permit Application Format and Contents are not sufficient to meet the requirements of the Coal Mining Rules. Prior to approval the applicant needs to provide the following in accordance with:

R645-301-120, Appendix 5-Q is included with the hard copy, but the discs do not contain a copy of that appendix: the Permittee needs to assure Appendix 5-Q is included with all final copies.

OPERATION PLAN

MAPS, PLANS, AND CROSS SECTIONS OF MINING OPERATIONS

Regulatory Reference: 30 CFR Sec. 784.23; R645-301-512, -301-521, -301-542, -301-632, -301-731, -302-323.

Analysis:

Mining Facilities Maps

Figure 1 in Appendix 5Q shows the new conveyor configuration, the widened load-out area, the concrete loading pads, and prefab retaining walls by the coal-storage area. Plates 2-1A, 2-3C, 5-2C, 5-2D, 5-6C, 7-1D, 7-1C, and 7-5 have been updated for this amendment.

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Findings:

Maps, Plans, and Cross Sections of Mining Operations are sufficient to meet the requirements of the Coal Mining Rules.

HYDROLOGIC INFORMATION

Regulatory Reference: 30 CFR Sec. 773.17, 774.13, 784.14, 784.16, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-300-140, -300-141, -300-142, -300-143, -300-144, -300-145, -300-146, -300-147, -300-147, -300-148, -301-512, -301-514, -301-521, -301-531, -301-532, -301-533, -301-536, -301-542, -301-720, -301-731, -301-732, -301-733, -301-742, -301-743, -301-750, -301-761, -301-764.

Analysis:

General

Figure 1 in Appendix 5Q is a schematic of the proposed loadout extension. Approximately 680 yd³ of material will be cut from the coal-storage side of the pad and moved to TS-7.

Three concrete loading pads, 82 ft by 12 ft by 1 ft thick each, will be built under the loading hoppers. The remaining area will be covered with 4 inches of asphalt and then the entire area is to be covered with superpave.

Diversions: Miscellaneous Flows

As outlined in Appendix 5Q, the load-out expansion will begin with removal of C-4D and C-5D, with D-3D extended to serve as a water bar across the shop access road and provide drainage control during construction. When the pad extension earthwork is complete, C-4D and C-5D will be reinstalled; their final locations are shown on Plate 7-1C. Five concrete drop-boxes with metal grates will be installed along C-5D to drain runoff from the pad; details of the boxes are shown in Figure 3. Mean calculated diameter needed for riprap at the outlet of C-5A is 3 inches. D-3D will be temporarily relocated against the new coal-storage cut during earthwork, but it will be removed during final paving. C-8D will also be eliminated by the extension of C-5D, and drainage from AD-7 will enter C-5D through the drop-boxes.

Tables 7-24 and 7-25 have been updated to show the changes in the ditches and culverts. Worksheets for C-5D, C-8D, D-3D, and D-5D in Appendix 7-G have been updated.

Findings:

Hydrologic Information is sufficient to meet the requirements of the Coal Mining Rules.

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RECOMMENDATIONS:

The Loadout Expansion amendment cannot be approved for insertion into the MRP until the deficiencies described above are addressed satisfactorily.

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